1. (Original) A method of translating device layout data into a format for use by a mask writing tool, comprising the acts of:

reading a file that defines a number of cells used to produce a device;

selecting one or more of the cells;

creating one or more modified cells based on the interaction of the selected cells with other cells in the device layout data; and

creating a description of the modified cells as well as their placements on the mask in a format that is readable by the mask writing tool.

2. (Original) The method of Claim 1, wherein the extents of at least some of the descriptions of the modified cells to be written on the mask overlap.

3. (Original) The method of Claim 1, wherein the step of creating one or more modified cells, further comprises the act of:

creating one or more additional cells that create structures on the mask that are not created by writing the descriptions of the modified cells and prevent extraneous structures from being created on the mask when descriptions of the modified cells are written.

4. (Original) The method of Claim 1, further comprising the act of:

creating one or more additional cells that create structures on the mask that are not created by writing the descriptions of the modified cells and prevent extraneous structures from being created on the mask when descriptions of the modified cells are written.

5. (Original) The method of Claim 1, wherein the selection of cells is limited to cells that are repeated in the device layout data.

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6.   (Original) The method of Claim 1, wherein each cell has a number of polygons that define structures to be created on the mask and wherein the selection of cells is limited to cells having a pattern of polygons that is repeated in the device layout data.

7.   (Original) The method of Claim 1, wherein each of the cells includes a number of polygons that define structures to be created on the mask and wherein the act of creating one or more modified cells includes the act of:

adding polygons to a selected cell that correspond to polygons from cells that overlap the selected cell.

8.   (Original) The method of Claim 1, wherein the act of selecting one or more cells further comprises the act of: selecting cells that maximize the area of the mask written with the descriptions of the selected cells and minimizes the time required to write the structures defined by the selected cells.

9.   (Original) The method of Claim 1, wherein the act of creating a description of the modified cells further comprises the acts of:

determining if the mask writing tool is capable of transforming the description of a modified cell to orient it in a proper direction and creating a suitable description of the modified cell that the mask writing tool can transform to orient the description of the modified cell in the proper direction.

10.   (Original) The method of Claim 1, wherein the method is executed using one or more computers.

11.   (Original) The method of Claim 10, wherein at least one of the one or more computers has multiple processors, and cell selection and creation are executed using several processors simultaneously.

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12. (Original) A method of creating a jobdeck for a mask writing tool, comprising the acts of:

reading a file that defines a device layout, the file including a number of cells that define structures to be created on a mask;

creating a set of cells in which at least two cells in the set have overlapping extents; the set of cells including:

one or more of the cells that are repeated in the device layout and that are modified to compensate for interactions with other cells in the device layout; and

one or more remainder cells that have structures that do not correspond to those in the modified cells and also contain areas to prevent extraneous structures on the mask from being created by writing files that correspond to the modified cells at selected locations on the mask;

creating a set of mask writer files that correspond to the modified cells and the one or more remainder cells; and

generating a jobdeck for the mask writing tool that specifies the set of mask writer files and their locations on the mask.

13. (Original) The method of Claim 12, wherein the method is executed using one or more computers.

14. (Original) The method of Claim 13, wherein the one or more computers has multiple processors, and cell selection and creation are executed using several processors simultaneously.

15-19. (Withdrawn)

20. (Original) A method of operating a mask writing tool to produce a mask for a layer of a device, comprising the acts of:

reading a number of files, each of which define structures to be created on the mask;

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reading a list of positions at which a corresponding file is to be written on the mask;

positioning a stage according to the list and writing a corresponding file;

reading a description of one or more remainder files that define structures on the mask that are not created by writing the files at the positions on the list and for preventing the creation of structures on the mask that would be created by writing the files at the positions on the list; and

positioning the stage and writing the one or more remainder files on the mask.

21.   (Withdrawn)

22.   (Original) A mask for creating a layer of a device that is created by the acts of:

reading a series of files at least some of which define structures that are repeated in the device layer and some of which have extents that overlap;

reading a number of positions at which the series of files are to be written;

moving a stage to the positions indicated; and

writing the files and the positions indicated.

23-27. (Withdrawn)

28.   (Original) A method of translating device layout data into a format for use by a wafer writing tool, comprising the acts of:

reading a file that defines a number of cells used to produce a device;

selecting one or more of the cells;

creating one or more modified cells based on the interaction of the selected cells with other cells in the device layout data; and

creating a description of each of the modified cells as well as their placements on the wafer in a format that is readable by the wafer writing tool.

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29. (Original) The method of Claim 28, wherein the extents of at least some of the cells to be written on the wafer overlap.

30. (New) A computer-readable medium having stored thereon a sequence of instructions that, when executed by the computer, cause the computer to translate device layout data into a format for use by a mask writing tool by:

reading a file that defines a number of cells used to produce a device;

selecting one or more of the cells;

creating one or more modified cells based on the interaction of the selected cells with other cells in the device layout data; and

creating a description of the modified cells as well as their placements on the mask in a format that is readable by the mask writing tool.

31. (New) The computer-readable medium of Claim 30, wherein the instructions cause the computer to create one or more modified cells by:

creating one or more additional cells that create structures on the mask that are not created by writing the description of the modified cells and prevent extraneous structures from being created on the mask when descriptions of the modified cells are written.

32. (New) The computer-readable medium of Claim 30, wherein the instructions cause the computer to create one or more additional cells that create structures on the mask that are not created by writing the descriptions of the modified cells and prevent extraneous structures from being created on the mask when descriptions of the modified cells are written.

33. (New) A computer-readable medium including a series of instructions that, when executed by a computer cause the computer to create a jobdeck for a mask writing tool by:

reading a file that defines a device layout, the file including a number of cells that define structures to be created on a mask;

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creating a set of cells in which at least two cells in the set have overlapping extents; the set of cells including:

one or more of the cells that are repeated in the device layout and that are modified to compensate for interactions with other cells in the device layout; and

one or more remainder cells that have structures that do not correspond to those in the modified cells and also contain areas to prevent extraneous structures on the mask from being created by writing files that correspond to the modified cells at selected locations on the mask;

creating a set of mask writer files that correspond to the modified cells and the one or more remainder cells; and

generating a jobdeck for the mask writing tool that specifies the set of mask writer files and their locations on the mask.

34.　　(New) The computer-readable medium having a series of instructions that, when executed by a computer, cause the computer to translate device layout data into a format for use by a wafer writing tool by:

reading a file that defines a number of cells used to produce a device;

selecting one or more of the cells;

creating one or more modified cells based on the interaction of the selected cells with other cells in the device layout data; and

creating a description of each of the modified cells as well as their placements on the wafer in a format that is readable by the wafer writing tool.

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